

Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Savannah River**

Site Summary Level: **Savannah River Site**

Project **SR-FA13 / RBOF Deactivation Project**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0510**

General Project Information

Project Description Narratives

Purpose, Scope, and Technical Approach:

Purpose, Scope, and Technical Approach

Definition of Scope: RBOF deactivation scope includes:

1. Remove racks and storage equipment from the spent fuel pools;
2. Drain the basin water;
3. Remove wall and floor deposits;
4. Isolate utilities;
5. Complete draining of all process water lines; and,
6. Dispose of basin deionizers.

Technical Approach: Deactivation of RBOF can be accomplished with existing technology, although new technologies may reduce the cost and shorten the schedule for deactivation.

Project Status in FY 2006:

Site funding limitations currently preclude funding for the larger deactivation projects that would be needed to significantly reduce RBOF surveillance and maintenance costs. Current funding guidance indicates that RBOF will remain operational until FY2007, with deactivation beginning thereafter. This does not preclude, however, the planning and implementation of smaller scale projects encompassing a portion of the scope for this ACP project. These projects would be initiated to reduce a specific risk, thereby lowering surveillance and maintenance costs associated with that particular risk. Funding for this type of project would be incremental to the RBOF surveillance and maintenance budget. As funding for these small scale projects is speculative, no consideration is given to them in this PBS.

Post-2006 Project Scope:

The post-FY2006 work scope is essentially the entire deactivation project work scope. Current funding guidance indicates that these deactivation activities will begin after FY2007. Deactivation is expected to be complete by FY2011. At such time, a routine of quarterly surveillances will be established. These surveillances will verify the structural integrity of the facility, and verify the operational integrity of any environmental monitoring equipment required by the surveillance and maintenance plan. This quarterly monitoring will continue until final disposition of the facilities.

Project End State

This project provides for the deactivation of RBOF only. Additional projects will be required to meet the EM site end state. Contamination in RBOF is expected to be removed or fixed. At this time, an end state for the facility in has not been defined. No plans have been made at this time to reuse the facility after deactivation (post-FY2011).

No nuclear materials, spent fuel, or high level waste will be stored in RBOF at the time of deactivation, nor will any be generated by this project.

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Project Description Narratives

Wastes generated by this project will be primarily job control wastes from decontamination efforts.

Cost Baseline Comments:

Costs identified in this PBS are rough order of magnitude engineering estimates only. Some historical data for a few activities, such as line draining, was used for these estimates. Work scope identified in this PBS is based on process and facility history only, not from detailed characterization of facility hazards. Such characterization efforts will likely alter the scope and cost of this project.

Safety & Health Hazards:

As the project will not be funded until after FY06, no safety and hazards analysis has been performed for RBOF deactivation activities. Such analyses will be performed in accordance with Site standards. The criteria for determining the radiological hazard categories are provided in DOE-STD-1027-92, and the criteria for determining the chemical hazard categorization are provided in WSRC-MS-92-206.

Safety & Health Work Performance:

Activities and check points are described by the Integrated Management System Description. The conditions and requirements are clearly established and agreed upon prior to the starting of any project and those requirements are contractually binding upon WSRC. The key elements of the WSRC Integrated Safety Program are to define the scope of work, identify and analyze hazards associated with the work, develop and implement hazard controls, perform work within controls, and provide feedback on adequacy of controls and continue to improve safety management. The WSRC Integrated Procedures Management System is the primary mechanism for implementing the objective, principles and functions of the Safety Management System. This system establishes Company-Level, Division-level, and Program-specific procedures consistent with organizational roles, and ensures a consistent, discipline site-wide approach to safety while performing work.

PBS Comments:

None.

Baseline Validation Narrative:

Not Applicable.

General PBS Information

Project Validated?	Date Validated:
Has Headquarters reviewed and approved project?	No
Date Project was Added:	12/1/1997
Baseline Submission Date:	7/3/1999
FEDPLAN Project?	Yes

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General PBS Information

Drivers:	CERCLA	RCRA	DNFSB	AEA	UMTRCA	State	DOE Orders	Other
	N	N	N	N	N	Y	Y	Y

Project Identification Information

DOE Project Manager: S. L. Johnson

DOE Project Manager Phone Number: 803-557-3828

DOE Project Manager Fax Number: 803-557-3669

DOE Project Manager e-mail address: sandra-l.johnson@srs.gov

Is this a High Visibility Project (Y/N):

Planning Section

Baseline Costs (in thousands of dollars)

	1997-2006 Total	2007-2070 Total	1997-2070 Total	1997	Actual 1997	1998	Actual 1998	1999	2000	2001	2002	2003	2004	2005	2006	
PBS Baseline (current year dollars)	0	11,550	11,550						0	0	0	0	0	0	0	
PBS Baseline (constant 1999 dollars)	0	8,378	8,378						0	0	0	0	0	0	0	
PBS EM Baseline (current year dollars)	0	11,550	11,550						0	0	0	0	0	0	0	
PBS EM Baseline (constant 1999 dollars)	0	8,378	8,378						0	0	0	0	0	0	0	
	2007	2008	2009	2010	2011- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035	2036- 2040	2041- 2045	2046- 2050	2051- 2055	2056- 2060	2061- 2065	2066- 2070
PBS Baseline (current year dollars)	0	814	3,211	4,204	3,321	0	0	0	0	0	0	0	0	0	0	0

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	2007	2008	2009	2010	2011- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035	2036- 2040	2041- 2045	2046- 2050	2051- 2055	2056- 2060	2061- 2065	2066- 2070
PBS Baseline (constant 1999 dollars)	0	629	2,417	3,082	2,250	0	0	0	0	0	0	0	0	0	0	0
PBS EM Baseline (current year dollars)	0	814	3,211	4,204	3,321	0	0	0	0	0	0	0	0	0	0	0
PBS EM Baseline (constant 1999 dollars)	0	629	2,417	3,082	2,250	0	0	0	0	0	0	0	0	0	0	0

Baseline Escalation Rates

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
			3.60%	3.60%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%
2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	2051-2055	2056-2060	2061-2065	2066-2070
2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%

Project Reconciliation

Project Completion Date Changes:

Previously Projected End Date of Project: 9/1/2015

Current Projected End Date of Project: 6/1/2011

Explanation of Project Completion Date Difference (if applicable):

Project Cost Estimates (in thousands of dollars)

Previously Estimated Lifecycle Cost (1997 - 2070, 1998 Dollars): 8,157 Actual 1997 Cost: Actual 1998 Cost:

Previously Estimated Lifecycle Cost of Project (1999 - 2070, 1998 Dollars): 8,157 Inflation Adjustment (2.7% to convert 1998 to 1999 dollars): 220

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Project Reconciliation

Previously Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars): 8,377

Project Cost Changes

Cost Adjustments Reconciliation Narratives

Cost Change Due to Scope Deletions (-):

Cost Reductions Due to Efficiencies (-):

Cost Associated with New Scope (+):

Cost Growth Associated with Scope Previously Reported (+):

Cost Reductions Due to Science & Technology Efficiencies (-):

Subtotal: 8,377

Additional Amount to Reconcile (+): 1

Current Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars): 8,378

Milestones

Milestone/Activity	Field Milestone Code	Original Date	Baseline Date	Legal Date	Forecast Date	Actual Date	EA	DNFSB	Mgmt. Commit.	Key Decision	Intersite
Project Mission Complete	SR-FA13-008		6/1/2011								
Project Start	SR-FA13-001		10/1/2007								
RBOF Deactivated	SR-FA13-003		9/1/2010								

Milestones - Part II

Milestone/Activity	Field Milestone Code	Critical Decision	Critical Closure Path	Project Start	Project End	Mission Complete	Tech Risk	Work Scope Risk	Intersite Risk	Cancelled	Milestone Description
Project Mission Complete	SR-FA13-008				Y						
Project Start	SR-FA13-001			Y							
RBOF Deactivated	SR-FA13-003		Y				1	4	1		

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Performance Measure Metrics

Category/Subcategory	Units	1997-2006 Total	2007-2070 Total	1997-2070 Total	Actual Pre-1997	Planned 1997	Actual 1997	Planned 1998	Planned 1999	Planned 2000	Planned 2001	Planned 2002	Planned 2003	Planned 2004
Tech.														
Deployed	Ntd	0.00	10.00	10.00										
Category/Subcategory	Units	Planned 2004	Planned 2005	Planned 2006	Planned 2007	Planned 2008	Planned 2009	Planned 2010	Planned 2011 - 2015	Planned 2016 - 2020	Planned 2021 - 2025	Planned 2026 - 2030	Planned 2031 - 2035	
Tech.														
Deployed	Ntd						10.00							
Category/Subcategory	Units	Planned 2036 - 2040	Planned 2041 - 2045	Planned 2046 - 2050	Planned 2051 - 2055	Planned 2056 - 2060	Planned 2061 - 2035	Planned 2066 - 2070	Exceptions	Lifecycle Total				
Tech.														
Deployed	Ntd									10.00				

Technology Deployments

Deployment Year			
Deployment Status	Planned	Forecast	Actual Date
Technology Name: Laser Surface Cleaning			
Potential Deployment	2009		
Technology Name: Small Pipe Characterization System (SPCS)			
Potential Deployment	2009		
Technology Name: In Situ Chemical Treatment of Asbestos			
Potential Deployment	2009		

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Technology Deployments

		Deployment Year		
<u>Deployment Status</u>		<u>Planned</u>	<u>Forecast</u>	<u>Actual Date</u>
Technology Name:	Portable X-Ray, K-Edge Heavy Metal Detector			
Potential Deployment		2009		
Technology Name:	Thermal Conversion of Asbestos			
Potential Deployment		2009		
Technology Name:	2-D Linear Motion System			
Potential Deployment		2009		
Technology Name:	Pipe Crawler Internal Piping Characterization System			
Potential Deployment		2009		
Technology Name:	Pegasus Coating Removal			
Potential Deployment		2009		
Technology Name:	Diamond wire cutting			
Potential Deployment		2009		
Technology Name:	Reducing grout			
Potential Deployment		2009		

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